

PATENT  
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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FEB 28 2002

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In the Application of:

STEPHEN M. ALLEN ET AL.

CASE NO.: BB1429 US NA

APPLICATION NO.: 09/740,288

GROUP ART UNIT: 1652

FILED: DECEMBER 19, 2000

EXAMINER: M. WALICKA

FOR: PLANT BIOTIN SYNTHASE

AMENDMENT AND RESPONSE TO RESTRICTION REQUIREMENTCommissioner of Patents and Trademarks  
Washington, DC 20231

Sir:

In response to the Office Action of January 2, 2002, and before examination on the merits, please amend the above-referenced application as follows and consider the following remarks:

**IN THE CLAIMS:**

~~Please cancel claims 6-8, 16-20, 22, and 23.~~

~~Please replace the following claims:~~

- a<sup>1</sup>
1. "amended" An isolated polynucleotide comprising:
    - (a) a nucleotide sequence encoding a polypeptide having biotin synthase activity, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:22 or 24 have at least 85% sequence identity based on the Clustal alignment method, or
    - (b) the complement of the nucleotide sequence, wherein the complement and the nucleotide sequence contain the same number of nucleotides and are 100% complementary.
  2. "amended" The polynucleotide of Claim 1, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:22 or 24 have at least 90% sequence identity based on the Clustal alignment method.
  3. "amended" The polynucleotide of Claim 1, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:22 or 24 have at least 95% sequence identity based on the Clustal alignment method.
  4. "amended" The polynucleotide of Claim 1 wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:22 or 24.
  5. "amended" The polynucleotide of Claim 1, wherein the nucleotide sequence comprises the nucleotide sequence of SEQ ID NO:21 or 23.

- a<sup>2</sup>
14. "amended" A method for producing a nucleic acid molecule comprising
    - (a) selecting a polynucleotide of Claim 1, and
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